

rapidly decomposing pyrophyllite, which contains fully 27 per cent. of alumina. This opinion is based on two facts:

1. Only since pyrophyllite has become abundant has this efflorescence been noticed.

2. Only at collieries where pyrophyllite is found, can traces be found of the alum deposit.

I propose to make some experiments that may throw further light on the subject; but facts, as far as observed, point to this origin of a mineral not heretofore credited to this locality. It adds one more to the extremely limited list of minerals found in the anthracite coal-field.

*New Locality for Mountain Cork.*—THEO. D. RAND announced a new locality for mountain cork, about one-third of a mile north-west of Radnor Station, P. R. R., Delaware Co., Pa., where it was found by him in the soil overlying the serpentine belt.

*A New Locality for Aquacreptite.*—MR. G. HOWARD PARKER announced a new locality for aquacreptite. He had found it as a seam or vein in partially decomposed micaceous gneiss on Lansdowne Avenue,  $1\frac{1}{2}$  miles west of Hestonville, Philadelphia.

*Note on Aquacreptite.*—Prof. LEWIS remarked that as bearing upon the genesis of aquacreptite, it was of interest to observe that at each of the three localities where that mineral had been discovered the rock enclosing it was different from that at either of the other localities. Aquacreptite was first found at Strode's Mill, Chester County, by Mr. Jefferis, as long ago as 1832. It was known by local mineralogists under various names until described by Prof. Shepard, in 1868, as a new mineral. At this, the original locality, it occurred in serpentine. The second locality, near Marble Hall, Montgomery County, was discovered by the speaker in 1872, and is mentioned in Dr. Genth's Report on the Mineralogy of Pennsylvania. It here occurs in a pocket in limestone. At the third locality, West Philadelphia, now reported by Mr. Parker, it occurs in gneiss.

From the existence of aquacreptite in these diverse rocks, it seems probable that its origin cannot be ascribed to any direct alteration, but that, as in clays, it is in part mechanical.

Aquacreptite is a variety of bole, differing from other varieties in the greater degree of decrepitation which it undergoes when placed in water. Some time ago the speaker had made some experiments to determine the cause of this remarkable decrepitation. He had found that it was a purely mechanical action due to capillary attraction. When the porous mineral is suddenly immersed in water or any other liquid, the liquid enters its pores so rapidly as to split it open. If, however, it is gradually moistened and the enclosed air is replaced slowly by liquid, no decrepitation takes place upon subsequent immersion. That no

chemical action takes place is shown by the fact that if, after the decrepitation of the mineral, the fragments are dried, these fragments will again decrepitate when immersed in liquid, and this operation can be repeated as long as any fragments of sufficient size remain. Decrepitation takes place, whatever liquid is used, varying in degree with the mobility of the liquid employed. While very energetic in boiling water, it takes place with great slowness in sweet oil. The decrepitation of the aquacrepitite of the three different localities varies also with the density of the specimens. The West Philadelphia mineral decrepitates and gives out bubbles the most rapidly, and the Chester County mineral the most slowly of the three. In some of the Chester County specimens decrepitation takes place very slowly in cold water, being most slow in the most compact specimens. The aquacrepitite from Marble Hall falls to the smallest fragments. The hardness varies in different specimens from the same locality, the most variable, being however, at the Chester County locality. In general, the aquacrepitite of the three localities has the following hardness, viz.: Chester County,  $> 2$ ; Marble Hall,  $= 2$ ; W. Phila.,  $< 2$ .

The emission of air-bubbles, and the phenomenon of decrepitation when immersed, may be observed in a less degree in several of the varieties of bole; and it is questionable whether a greater amount of a purely mechanical action entitles a substance of probably mechanical origin to a special mineralogical name.

*Quartz Crystals from Newark, Del.*—Mr. W. W. JEFFERIS stated that he had found a number of doubly-terminated quartz crystals lying loose in the soil at a new locality, near Newark, Delaware.

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*Some Ochreous Deposits of Kentucky and Indiana.*—Prof. R. B. WARDER made the following communication:

At the village of Francisville, Boone Co., Ky., a ferruginous mass crops out in the road; and a specimen of it is herewith exhibited. It consists chiefly of sand, clay and ferric hydrate, with smaller quantities of manganese and lime. A few rods north of this outcrop are many drift pebbles and some boulders; but the largest grain of sand observed in the ochreous mass was less than four millimetres in diameter. The whole bed seems to consist of rather finely pulverized siliceous drift materials, cemented with a considerable amount of iron; it resembles bog iron ore in appearance, but it probably contains too small a percentage of iron to rank as an ore, and the bed is of very limited extent.

In the neighboring parts of Indiana, very similar deposits occur at several points in Dearborn, Ohio and Switzerland Counties,